

MASIMO.007C2

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Diab et al. ) Group Art Unit 3736  
Appl. No. : 08/943,511 )  
Filed : October 6, 1997 )  
For : SIGNAL PROCESSING )  
APPARATUS )  
Examiner : Unknown )

Preliminary Amendment

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Prior to Examination on the merits, please add the following new claims.

In The Claims:

Please cancel Claims 19-34, 37 and 38. Please add the following new Claims 39-50.

39. A pulse oximeter comprising:

an input configured to receive at least two measured intensity signals generated by the detection of multiple wavelengths of light transmitted through body tissue, said intensity signals each having a portion substantially dependent upon arterial blood oxygen saturation;

a Kalman filter that calculates an estimate of a physiological signal related to at least one of said intensity signals; and

a processor that tracks said portions in the presence of motion based upon said estimate to derive an oxygen saturation value.